

February XX, 2016

John J. Entsminger
General Manager
Southern Nevada Water Authority
P.O. Box 99956
Las Vegas, NV 89193

Re: SNWA Las Vegas Wash Erosion Control Structures

Dear Mr. Entsminger:

I am writing to memorialize recent discussions between the Nevada Division of Environmental Protection ("NDEP") and Southern Nevada Water Authority ("SNWA") regarding funding for construction of Las Vegas Wash erosion control structures and to request that SNWA assist NDEP and the Nevada Environmental Response Trust ("NERT") in determining the feasibility of reducing perchlorate loading to the Las Vegas Wash and Lake Mead during weir construction.

The proposed Sunrise Mountain and Historic Lateral Weirs are located in an area along the Las Vegas Wash downstream of where the cone plume originating from the NERT (former Kerr McGee/Tronox) Site enters the Las Vegas Wash. This is an area that has elevated perchlorate concentrations in groundwater originating from the NERT (former Kerr McGee/Tronox) Site. As NDEP and SNWA agreed in June 2015, technical staff from NDEP and SNWA have reviewed the potential for these weirs to mitigate perchlorate impacts from the NERT site.

NDEP and SNWA staff have not been able to come up with a specific weir design that directly and effectively benefits remediation of the NERT perchlorate groundwater contamination. NDEP also reviewed this issue with technical staff from NERT and the US Environmental Protection Agency ("EPA") and they came to same conclusion. Therefore, it does not appear that NERT funds can not be used for actual weir construction, since the court agreements designating use of NERT funds require that they be used for investigation and cleanup of legacy pollution that came from the NERT site.

However, dewatering during construction of the Sunrise Mountain and Historic Lateral weirs has the potential to add up to 3 tons of perchlorate from contaminated groundwater directly to the Las Vegas Wash. It is an eligible use of NERT funds to order the NERT to fund the to the remove treatment of perchlorate from this groundwater prior to discharge, provided the work is conducted in accordance with a plan and budget approved by NDEP in consultation with EPA. Concentrations in the Las Vegas Wash are currently between 30 and 40 ppb, already above the Nevada provisional Action Level of 15 ppb. Additional perchlorate load of up to 50 lbs/day during weir construction would further exceed Nevada's protective water quality concentration and contribute additional perchlorate mass to Lake Mead. Also, in February 2015 California lowered its public health goal for perchlorate to 1 ppb, which could trigger future lowering of its 6 ppb

Commented [FA1]: Allison Fong:

Suggested edit:
necessity and feasibility of treating perchlorate loading to the Las Vegas Wash and Lake Mead during weir construction.

Commented [FA2]: Steve Armann:

This is a definitive statement. Is there a chance that some contaminated gw could come from AMPAC?

~~maximum contaminant level (MCL), increasing the importance of preventing additional perchlorate from entering the Colorado River System. In the interest of human health and water resource protection, NDEP has determined that all feasible efforts should be made to prevent or reduce further exceedances of protective water quality concentrations.~~

Commented [FA3]: Steve Armann:

This should be modified to read something like "all practical and cost effective" "All feasible" does not mean practical and cost effective. It essentially says, even if not cost effective, it will be done.

NDEP plans to direct NERT to prepare a ~~report due by April 30, 2016 that evaluates the cost, feasibility, schedule and permitting requirements for treating groundwater extracted during weir construction dewatering. We anticipate that NERT would perform and fund the construction and operation of this the treatment system system through completion of the dewatering process. NERT's role -funding-~~ ~~is anticipated to include payment for construction of conveyance piping from dewatering locations to the treatment facility, as well as facilitating the design, construction, operation, maintenance and reporting associated with the treatment. NDEP understands that SNWA has plans to commence weir construction by 2017. This should provide enough time for NDEP, NERT and EPA to come to a determination on the necessity of the and feasibility of this groundwater treatment.~~

Commented [FA4]: Steve Armann:

Is this level of detail necessary in this letter. I commented during our call that it may be better for NERT to fund SNWA to do the work rather than doing it themselves. Has this option been rejected?

Commented [FA5R4]: Alison Fong:

From the 2nd to last paragraph, it appears what is being suggested is:

NERT funds all work to construct conveyances and operate treatment.

- SNWA will do the work to construct conveyances to treatment
- NERT will do the work to design/operate treatment.

Suggested edit to highlighted section:

NERT funding is anticipated to include payment for SNWA construction of conveyance piping from dewatering locations to the treatment facility, as well as NERT design, construction, operation, maintenance and reporting associated with the treatment.

Commented [FA6]: Steve Armann:

Same comment as above.

Treatment and discharge of the extracted groundwater into the Las Vegas Wash would require a NPDES permit subject to concentration limits on perchlorate along with other standard conditions consistent with Las Vegas Wash designated beneficial uses. At this time, NDEP and NERT anticipate that NERT would apply for and maintain compliance with the NPDES permit for discharge of the extracted groundwater.

NDEP requests SNWA's assistance in coordinating with NERT on the evaluation and providing the following information:

- ~~* NERT and NDEP staff to list specific information requests...~~
- * Anticipated schedule for bidding and construction of weirs;
- * Access to groundwater monitoring wells along the Las Vegas Wash to characterize groundwater quality at the weir construction area;
- * Access to historical construction records regarding the dewatering methods employed, groundwater extraction rates, and measured perchlorate concentrations in groundwater;
- * Development of a conceptual dewatering plan to identify the approximate dewatering rate during construction and the approximate schedule at both weir locations;
- * Development of a conceptual design for conveying water from dewatering operations to the treatment system; and
- * Identifying property ownership along the influent pipeline corridor to the treatment system.

NDEP also requests that SNWA include conveyance of dewatering water to a designated NERT treatment location as a segregated set of costs in the construction bid packages for the Sunrise Mountain and Historic Lateral weirs.

[I think it beneficial to add language here along the lines of : NDEP would appreciate SNWA's concurrence on this matter prior to February 23, 2016 so it can be discussed at the NERT Annual Stakeholder Meeting.]

Commented [FA7]: Alison Fong:

EPA also had the same comment about including a date with the request for SNWA's schedule and costs to construct conveyances. This would be considered by NERT/NDEP/EPA along with NERT's 4/30/16 evaluation of schedule and costs for treatment.

Mr. John Entsminger
February x, 2016
Page [PAGE * MERGEFORMAT]2

Please contact me with any questions at 775-687-9301 or have your staff contact Mr. JD Dotchin at 702-486-2850 extension 235.

Sincerely,

Dave Emme
Administrator

EC:

Leo Drozdoff, DCNR
Greg Lovato, NDEP
Jennifer Carr, NDEP
Bruce Holmgren, NDEP
Cliff Lawson, NDEP
James Dotchin, NDEP BISC Las Vegas
Carlton Parker, NDEP BISC Las Vegas
Alison Fong, U.S. Environmental Protection Agency, Region 9
Letitia Moore, U.S. Environmental Protection Agency, Region 9
Andrew Steinberg, Nevada Environmental Response Trust
Charles K. Hauser, Esq., Southern Nevada Water Authority
Dave Johnson, LVVWD
Jasmine Mehta, AG Office
Jay Steinberg, Nevada Environmental Response Trust
Todd Tietjen, SNWA